

MAKERERE UNIVERSITY BUSINESS SCHOOL

COURSEWORK TWO ASSIGNMENT FOR THE

BACHELOR OF OFFICE & INFORMATION MANAGEMENT

COURSE NAME: INTERNET & EMERGING TECHNOLOGIES (BUC 1219)

INSTRUCTIONS

- ❖ *This is an individual assignment ([Not to be done in groups](#))*
 - ❖ *The assignment should be typed (Times New Roman, 1.5line spacing, Font size 12)-max*
 - ❖ *Make use of practical and relevant examples.*
 - ❖ *Deadline for the assignment is Friday 29th March 2024 at 12:00pm*
 - ❖ *Submit the assignment to amiwanda@mubs.ac.ug*
-

DRIVING ENTERPRISE TRANSFORMATION THROUGH THE INTERNET OF THINGS (IOT)

IBM is at the forefront of helping clients implement new technologies that not only bring increased operational efficiency but also recast their customers' experiences, revolutionize business models and enable companies to reimagine how their industries operate.

It's no secret that IoT technologies have developed and evolved over the past decade in drastic ways. Affordable sensors and fast connections have radically increased the amount and type of data available, and altered the way companies collect and use it. More importantly, they have changed the way many conduct businesses. This technological shift is challenging some of the oldest brands to explore new ways of thinking about their identities, and IBM is playing a central role in driving these transformations.

“We're seeing traditional strategies, technologies and business models change faster than companies can keep up because of this tremendous transformation brought about through the Internet of Things,” said Chris O'Connor, general manager, Internet of Things for IBM. “Fortunately, the IoT revolution has also allowed us to give enterprises the ability to access and analyze data quickly and efficiently, creating meaningful insights that benefit business and society alike. Our goal is to harness this fundamental transformation to improve performance, optimize supply chains and enhance service delivery for our customers.”

One-way IBM is helping its customers realize the potential of the IoT is by providing the technological infrastructure to support the launch of new business lines.



Since its founding in 1924, Daimler has become one of the world’s premier automotive manufacturers, producing highly recognizable brands such as Mercedes, Maybach, Smart and Freightliner. Not satisfied with only using IoT technologies to revolutionize internal operations, Daimler turned to IBM to help launch car2go, an on-demand fleet of eco-friendly Smart cars that users can reserve through a mobile app. Car2go represents a bold reimagining of the automaker’s role in the broader transportation industry and none of what it does would have been possible without the IoT.

Sensors and wireless communications allow the company to monitor individual vehicle performance, analyze data to increase efficiency, and provide an accessible network of vehicles to its customers. An intuitive mobile app allows members to take any of the car2go vehicles distributed around them, or reserve a vehicle for future use. This provides customers with easy access to a vehicle when they need it, without requiring them to purchase a vehicle or pay for a parking spot, which can be very expensive in the large cities car2go serves.

Daimler’s use of IoT technology allows creative collaboration with adjacent industries. For example, user-specific data makes it possible to offer insurance policies customized for the user and trip, instead of traditional policies based on aggregate data for all users. IBM has provided the technological expertise and tools, as well as fostered the cross-industry relationships, necessary to make car2go a success.

Daimler turned to IBM to help launch car2go, an on-demand fleet of eco-friendly Smart cars that users can reserve through a mobile app.

IBM also is bringing the IoT revolution into the home-appliance sector through a partnership with Whirlpool. The partnership, originally formed in 2014, enables Whirlpool to use the IBM Watson IoT Cloud to analyze fast streaming data from appliances to quickly create meaningful insights and provide more personalized services to its customers.

Using cognitive analytics, data management, and protection, Whirlpool can better understand how consumers use appliances, fine-tune performance, optimize the supply chain and enhance service delivery.

Using the Watson IoT Cloud, Whirlpool can also tap into IBM's predictive maintenance capabilities to access multiple data sources in real time to predict any potential issues, avoiding quality and customer-satisfaction issues and reducing maintenance costs. Whirlpool is also using IBM Cloud Business Solutions to help customers make an impact in their communities, like making a small donation to Habitat for Humanity every time a load of laundry is washed.

Daimler and Whirlpool are examples of the many companies IBM is supporting through IoT-driven transformation. Both prove that the IoT has the potential to become an economic game changer, even for well-established companies.

REQUIRED

- a) Examine the capability of Internet of Things (IoT) to transform business operations as reflected in the Daimler & Whirlpool scenario/case study.*
- b) Discuss the key requirements for the successful implementation and use of Internet of Things (IoT) in major industrial operations.*
- c) Discuss the major hindrances that hinder the Internet of Things (IoT) from delivering its intended results.*